U. S. BUREAU OF THE CENSUS
1997 INFORMATION TECHNOLOGY PLAN
OVERVIEW

A. Introduction

The Census Bureau is the primary source of basic statistics about the population and economy of the Nation. These statistics assist the Congress, the executive branch of the Federal Government, state and local governments, the general public, and the private sector in the development and evaluation of social and economic activities.

Our major programs are the periodic censuses, current surveys, and a wide range of reimbursable work for other agencies. The programs cover a broad spectrum of demographic and economic statistics. Census Bureau counts are the basis for apportioning Federal and state legislatures and delineating congressional districts. The censuses provide sampling frames and serve as benchmarks for the current surveys, which in turn provide key data for important economic and social indicators. A major source of socioeconomic data is the current population survey (CPS), which provides reports on a variety of demographic characteristics of the population such as age, race, education, income, and family composition, as well as employment and unemployment data. The Census Bureau's economic statistics provide key measures of business conditions. They are used extensively in determining broad indicators of economic activity such as the Gross National Product (GNP) and the index of industrial production.

The research and development program supports the primary mission. Current methodology research is directed toward measuring and controlling sources of error and for design and developing methods to maintain the anonymity of respondents with minimum effect on the utility of the published data. Current technology research is directed toward fostering and developing innovative use of the information technology in Census Bureau operations to enhance the quality, scope, and timeliness of products, and to reduce or contain costs.

To service the user community adequately, we must identify the need for data and deliver statistical products in a timely and cost-effective manner. To fulfill the critical and continually expanding mission to meet the data requirements of our users and to slow growth in operating costs, we must have modern technology and statistical tools at our disposal. We have become increasingly reliant upon information technology (IT) to improve the timeliness and quality of statistical products as we encounter scarce labor and dollar resources. Our extensive use of IT has been brought about also by our need to keep pace with new demands for statistical information and the increasing sophistication of the public in using census data. The application

of automation in the past has been concentrated mainly in areas such as data conversion, editing, disclosure analysis, imputation, statistical tabulations, and data analysis, with strong emphasis on maintaining the confidentiality of the data consistent with Title 13 of the United States Code.

We recognize the importance of maintaining a state-of-the-art capability in IT to accomplish our mission. We realize the need for timely and reliable production of many statistical products using our evolving complex of large-scale computers complemented by an extensive array of microcomputers and workstations. These computing resources linked by telecommunications networks enable our staff to develop, process, maintain, and disseminate enormous collections of basic data about the people and economy of this Nation.

Emphasis during the coming years will be in three primary areas:

- application of open-system principles to enhance our enterprise processing environment. Our objective is to maintain an environment that is highly scalable at minimum expense while enhancing the interoperability of our diverse computing platforms. We will ensure that newly developed applications are portable throughout the IT architecture's processing platforms.

- application of modern information technology to improve the information value of our data products and to make our data more accessible to our customers

- application of an accepted architectural model to develop the Census Bureau's IT architectural plan. For example, one accepted model is the Department of Defense's Technical Architecture For Information Management.

The above objectives are consistent with our IT Directorate mission statement:

"The IT Directorate will assert strong technical leadership and support for effective utilization of all Census Bureau information resources. In doing so, we will provide a cost-effective secure processing environment across diverse hardware, software, and telecommunication systems presenting seamless access to our users."

B.   Role of the IT Directorate

Purpose

The IT Directorate is responsible for the effective utilization of all Census Bureau information resources. The IT area is headed by the Associate Director for Information Technology. The principal purposes of the IT area are to:

- Provide high-quality, dependable information systems management and technical support, including appropriate technologies, software tools, and expert consultation.

- Maintain an environment that is highly scalable at minimum expense while enhancing the interoperability of our diverse computing platforms.

- Ensure that newly developed applications are portable between different platforms.

- Identify and apply new technology that will give the Census Bureau a competitive edge.

- Provide a comprehensive plan for an IT architecture that will guide future development.

- Manage, plan, allocate, evaluate and provide the use of resources within the IT Directorate's control so as to achieve Census Bureau policy and program objectives in the most efficient, effective, and economical manner possible.

- Organize and protect the Census Bureau's IT resources as corporate assets.

Clients and Users

As we implement this IT Plan, we realize that we need to satisfy the needs of our customers. Our customers include:

- Program Divisions
- Other U.S. Government agencies and Congress
- Oversight Agencies
- The American Public, for example:

  - taxpayers
  - business community
  - academicians

Principal Products, Services and Functions

The IT Directorate provides many products, services, and functions to both support our customers and the strategic direction of the Census Bureau.

- Facility management of the computer sites in Charlotte, Jeffersonville, and Suitland.

- Policies, procedures and standards to Bureau of the Census personnel and oversight personnel regarding use and management of IT resources.

- Physical security of the Bureau of the Census data and IT Directorate equipment resources.

- Management and support of "standard" hardware platforms, including PCs and workstations.

- Management and support of "standard" commercial software and system software regardless of hardware platform.

- Management of all Bureau of the Census voice and data communications networks.

- Consistent and timely assistance to users with problems affecting their IT resources.

- Planning documents for all IT resources.

- Training/Education.

Support Activities and Production Activities

The IT Directorate engages primarily in support activities. Activities of a support nature include those designed to maintain operations of IT resources and the computer facilities themselves and those designed to provide services, e.g., information, policies, recommendations to Bureau of the Census program areas, the Department of Commerce, other agencies, and officials in Washington.

Contribution of IT Directorate's Products, Services and Functions to the Mission of the Bureau of the Census

- State-of-the-art capability in IT allows timely and reliable production of the Census Bureau's many statistical products.
- The Census Bureau's extensive use of IT will enable the Census Bureau to keep pace with new demands for statistical information and the increasing sophistication of the public using census data.
- Provide services to enhance the utility of automation technology.

Unique/Distinctive Contribution to Census Bureau's Mission

The IT Directorate has primary responsibility for economically and efficiently providing the Census Bureau with the IT support and resources necessary for accurate, timely, and complete statistical information.

Philosophy for Managing the IT Directorate

The Associate Director for Information Technology believes that the IT Directorate retains primary responsibility for information resource management. For example, the development of the Census Bureau's IT architectural plan. However, the Associate Director realizes that program officials increasingly must share this responsibility in order to maximize program benefits. This

is reflected in the goals and objectives of the newly developed Census Bureau Strategic Plan. The Bureau's Strategic Plan provides the strategic direction for the IT Directorate Strategic Plan which provides more specific direction for the IT Operational Plan. The challenge for the IT Directorate is to define the role and responsibilities of enterprise-wide information resources management in an increasingly strategic and complex environment.

To that end, the Associate Director uses the strategic planning process as the basis for setting the direction and tone of the IT Directorate. More specifically, the Associate Director draws together the IT Directorate managers as a group when developing IT goals and strategies. As IT Directorate programs and policies are implemented as outlined in the IT Operational Plan, the Associate Director promotes constant interchange among division and agency personnel to insure the continued coordination of their efforts.

The Associate Director believes that it is vitally important to provide formal ways of communicating with our customers and involving them in the IT planning process. To this end, each Associate Director has an Information Technology Liaison (ITL). The ITLs are responsible for representing their Associate Directors on all IT issues. Also, many ITLs are program champions responsible for developing the recently reengineered IT Operating Plan now to be linked to the Census Bureau's budget.

The IT Directorate must also continue to assert strong technical leadership for effective utilization of all Census Bureau IT resources. To achieve this goal, the Associate Director has directed his staff to work toward providing a secure processing environment across diverse hardware, software, and telecommunication systems presenting seamless access for our users.

C. Strategic Plans

The Census Bureau's Strategic Plan provides the direction for the IT Directorate Strategic Plan. We have set a strategic direction intended to improve the value of our contributions to the American public and our customers. Through the goals which follow, we position ourselves to succeed in an ever-changing environment to carry out our mission to be the preeminent collector and provider of timely, relevant, and quality data about the people and economy of the United States.

Census Bureau's Strategic Goals

- Greater Customer Satisfaction. What our customers want must dictate what we do. Interviews with the Census Bureau's current, former, and potential customers revealed more dissatisfaction than we anticipated.

- Greater Productivity. Improved productivity results in lower costs, greater timeliness, and higher quality.

- Better Public Perception. By improving public perception, we will increase public cooperation with our censuses and surveys. Our respondents have a right to know the important reasons behind our data collection efforts. And we are obligated to minimize their work by asking only those questions we must.

- Develop a More Diverse, Effective, and Skilled Work Force. Our most important asset is the people who walk in our door every day. We want to maximize the benefits of diversity, strengthen our relationship with employees, and develop highly productive teams.

Information Technology Directorate Strategic Issues

- Continue developing and implementing an architecture which provides a secure processing environment across telecommunications systems and diverse hardware and software presenting seamless access for our users.

- Centralize the management of network resources to ensure they are treated as an enterprise resource.

- Optimize the Census Bureau's technology R&D and technology transfer.

- Develop a planning discipline to allocate, evaluate and maintain the use of IT resources to achieve Census Bureau program objectives.

- Provide data integrity across all platforms.

- Manage Census Bureau-wide computing resources.

The Information Technology Directorate's Strategic Plan complements the strategic goals of our primary intercensal customers, the Directorates for Economic and Demographic Programs.

D. Information Technology Management Issues

OPEN SYSTEMS TECHNICAL ARCHITECTURE

We now have a management plan which shows how the Census Bureau will transit to an open systems technical architecture. This program development plan acts as the umbrella plan which encompasses and provides the direction for the other program development plans as we move toward our strategic direction of an open systems environment.

E. IT Plan Structure

This submission is a major revision of the IT plan structure. The plan is now linked to the budget. It has a Management Plan for the Open Systems Technical Architecture Program Development

Plan (PDP) which acts as an umbrella for the remaining PDPs. Those PDPs are aggregated into six sections representing the major organizations of the Census Bureau. These sections contain the major PDPs of those organizations. Each PDP is divided into an Architecture Plan that contains the relatively static program information and an Annual Plan that describes near term objectives.